



Billing Code 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[Docket No. 120418011-2011-01]

RIN 0648-XB141

Endangered and Threatened Wildlife; 90-Day Finding on two Petitions to List White Marlin as Threatened or Endangered Under the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Notice of 90-day petition finding.

SUMMARY: We (NMFS) announce a 90-day finding on two petitions to list white marlin (*Kajikia albidus*) as threatened or endangered under the Endangered Species Act (ESA). We find that the petitions do not present substantial scientific information indicating that the petitioned action may be warranted.

ADDRESSES: Copies of the petitions and related materials are available upon request from the Assistant Regional Administrator, Protected Resources Division, Southeast Regional Office, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701, or online at:

<http://sero.nmfs.noaa.gov/pr/ListingPetitions.htm>

FOR FURTHER INFORMATION CONTACT: Dr. Stephanie Bolden, NMFS Southeast Region, 727-824-5312, or Margaret Miller, NMFS Office of Protected Resources, 301-427-8403.

SUPPLEMENTARY INFORMATION:

Background

On February 9, 2012, we received a petition from Mr. James Chambers to list white marlin (*Kajikia albidus*) as threatened or endangered under the ESA. We received a separate petition to list white marlin from the Center for Biological Diversity (CBD) on April 3, 2012. Copies of these petitions are available from us (see ADDRESSES, above). The joint USFWS/NMFS petition management handbook states that if we receive two petitions for the same species and a 90-day finding has not yet been made on the earlier petition, then the later petition will be combined with the earlier petition and a combined 90-day finding will be prepared. Given that, this 90-day finding addresses petitions from both Mr. Chambers and CBD requesting us to list white marlin under the ESA.

We have previously reviewed the status of the white marlin for ESA listing as a result of a petition and legal action from these petitioners. In 2001, we received our first petition from Mr. Chambers, and the Biodiversity Legal Foundation, requesting us to list the white marlin as a threatened or endangered species. We convened a status review team to assess the species status and the degree of threat and prepared a status review report (Atlantic White Marlin Status Review Document, WMSRT, 2002). We published our determination on September 9, 2002, that white marlin did not warrant ESA listing (67 FR 57204). In 2006, per a settlement agreement between NMFS, CBD, and the Turtle Island Restoration Network, we revisited the status of the white marlin following the 2006 stock assessment by the International Commission for the Conservation of Atlantic Tunas (ICCAT). On December 21, 2006, we announced the initiation of a white marlin status review and solicited information regarding the status of and threats to the species (71 FR 76639) and convened a new biological review team (BRT) to commence a status review. The report (Atlantic White Marlin Status Review, AWMSR, 2007)

prepared by the BRT was peer reviewed and the final document incorporated peer review comments. After considering the AWMSR, we determined the white marlin was neither threatened or endangered (73 FR 843; January 4, 2008).

ESA Statutory and Regulatory Provisions and Evaluation Framework

Section 4(b)(3)(A) of the ESA of 1973, as amended (U.S.C. 1531 et seq.), requires, to the maximum extent practicable, that within 90 days of receipt of a petition to list a species as threatened or endangered, the Secretary of Commerce make a finding on whether that petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted, and to promptly publish such finding in the Federal Register (16 U.S.C. 1533(b)(3)(A)). When we find that substantial scientific or commercial information in a petition indicates the petitioned action may be warranted (a “positive 90-day finding”), we are required to promptly commence a review of the status of the species concerned during which we will conduct a comprehensive review of the best available scientific and commercial information. In such cases, we are to conclude the review with a finding as to whether, in fact, the petitioned action is warranted within 12 months of receipt of the petition. Because the finding at the 12-month stage is based on a more thorough review of the available information, as compared to the narrow scope of review at the 90-day stage, a “may be warranted” finding does not prejudice the outcome of the status review.

Under the ESA, a listing determination may address a “species,” which is defined to also include subspecies and, for any vertebrate species, any distinct population segment (DPS) that interbreeds when mature (16 U.S.C. 1532(16)). A joint NOAA-U.S. Fish and Wildlife Service (USFWS) policy clarifies the agencies’ interpretation of the phrase “distinct population segment”

for the purposes of listing, delisting, and reclassifying a species under the ESA (“DPS Policy”; 61 FR 4722; February 7, 1996). A species, subspecies, or DPS is “endangered” if it is in danger of extinction throughout all or a significant portion of its range, and “threatened” if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (ESA sections 3(6) and 3(20), respectively; 16 U.S.C. 1532(6) and (20)). Pursuant to the ESA and our implementing regulations, we determine whether species are threatened or endangered because of any one or a combination of the following five section 4(a)(1) factors: the present or threatened destruction, modification, or curtailment of habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; and any other natural or manmade factors affecting the species’ existence (16 U.S.C. 1533(a)(1), 50 CFR 424.11(c)).

ESA-implementing regulations issued jointly by NMFS and USFWS (50 CFR 424.14(b)) define “substantial information” in the context of reviewing a petition to list, delist, or reclassify a species as the amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted. In evaluating whether substantial information is contained in a petition, the Secretary must consider whether the petition: (1) clearly indicates the administrative measure recommended and gives the scientific and any common name of the species involved; (2) contains detailed narrative justification for the recommended measure, describing, based on available information, past and present numbers and distribution of the species involved and any threats faced by the species; (3) provides information regarding the status of the species over all or a significant portion of its range; and (4) is accompanied by the appropriate supporting documentation in the form of bibliographic

references, reprints of pertinent publications, copies of reports or letters from authorities, and maps (50 CFR 424.14(b)(2)).

Court decisions clarify the appropriate scope and limitations of the Services' review of petitions at the 90-day finding stage, in making a determination whether a petitioned action "may be" warranted. As a general matter, these decisions hold that a petition need not establish a "strong likelihood" or a "high probability" that a species is either threatened or endangered to support a positive 90-day finding.

We evaluate the petitioner's request based upon the information in the petition including its references, and the information readily available in our files. We do not conduct additional research, and we do not solicit information from parties outside the agency to help us in evaluating the petition. We will accept the petitioner's sources and characterizations of the information presented, if they appear to be based on accepted scientific principles, unless we have specific information in our files that indicates the petition's information is incorrect, unreliable, obsolete, or otherwise irrelevant to the requested action. Information that is susceptible to more than one interpretation or that is contradicted by other available information will not be dismissed at the 90-day finding stage, so long as it is reliable and a reasonable person would conclude it supports the petitioner's assertions. In other words, conclusive information indicating the species may meet the ESA's requirements for listing is not required to make a positive 90-day finding. We will not conclude that a lack of specific information alone negates a positive 90-day finding, if a reasonable person would conclude that the unknown information itself suggests an extinction risk of concern for the species at issue.

To make a 90-day finding on a petition to list a species, we evaluate whether the petition presents substantial scientific or commercial information indicating the subject species may be either threatened or endangered, as defined by the ESA. First, we evaluate whether the information presented in the petition, along with the information readily available in our files, indicates that the petitioned entity constitutes a “species” eligible for listing under the ESA. Next, we evaluate whether the information indicates that the species at issue faces extinction risk that is cause for concern; this may be indicated in information expressly discussing the species’ status and trends, or in information describing impacts and threats to the species. We evaluate any information on specific demographic factors pertinent to evaluating extinction risk for the species at issue (e.g., population abundance and trends, productivity, spatial structure, age structure, sex ratio, diversity, current and historical range, habitat integrity or fragmentation), and the potential contribution of identified demographic risks to extinction risk for the species. We then evaluate the potential links between these demographic risks and the causative impacts and threats identified in section 4(a)(1).

Information presented on impacts or threats should be specific to the species and should reasonably suggest that one or more of these factors may be operative threats that act or have acted on the species to the point that it may warrant protection under the ESA. Broad statements about generalized threats to the species, or identification of factors that could negatively impact a species, do not constitute substantial information that listing may be warranted. We look for information indicating that not only is the particular species exposed to a factor, but that the species may be responding in a negative fashion; then we assess the potential significance of that negative response.

Many petitions identify risk classifications made by other organizations or agencies, such as the International Union on the Conservation of Nature (IUCN), the American Fisheries Society (AFS), or NatureServe, as evidence of extinction risk for a species. Risk classifications by other organizations or made under other Federal or state statutes may be informative, but the classification alone may not provide the rationale for a positive 90-day finding under the ESA. For example, as explained by NatureServe, their assessments of a species' conservation status do "not constitute a recommendation by NatureServe for listing under the U.S. Endangered Species Act" because NatureServe assessments "have different criteria, evidence requirements, purposes and taxonomic coverage than government lists of endangered and threatened species, and therefore these two types of lists should not be expected to coincide" (<http://www.natureserve.org/prodServices/statusAssessment.jsp>). Thus, when a petition cites such classifications, we will evaluate the source information that the classification is based upon, in light of the standards on extinction risk and impacts or threats discussed above.

Species Description

The white marlin is a billfish (Family Istiophoridae) that inhabits the tropical and temperate waters of the Atlantic Ocean and adjacent seas. White marlin is considered to be a panmictic species: individuals move about freely within the Atlantic Ocean, over thousands of miles, and breed freely with other members of the population. Molecular markers have demonstrated that white marlin move significantly among regions (Graves and McDowell, 2003; Wells et al., 2010). White marlin exhibit sexually dimorphic growth patterns with females growing faster and achieving larger sizes than males. There is little information regarding the age and growth of white marlin as billfish are extremely difficult to age. Data limited to a single

location found that the sex ratio (proportion of females to males) increased steadily with size and nearly all fish larger than 2,000 cm were female (Arocha and Barrios, 2009).

White marlin are primarily general piscivores, but also feed on squid and other prey items (Nakamura, 1985). Spawning activity occurs during the spring (March through June) in northwestern Atlantic tropical and sub-tropical waters marked by relatively high surface temperatures (20°- 29°C) and salinities (> 35 ppt). The presence of white marlin larvae suggests there are at least five spawning areas in the western north Atlantic Ocean: northeast of Little Bahama Bank off the Abaco Islands; northwest of Grand Bahama Island; southwest of Bermuda; the Mona Passage, east of the Dominican Republic; and the Gulf of Mexico (AWMSR, 2007).

White marlin, along with other billfish and tunas, are managed internationally by the member nations of the ICCAT. ICCAT, through the Standing Committee for Research and Statistics (SCRS), conducts regular stock assessments for species under its purview: white marlin stock assessments were conducted in 2002, 2006, and 2012. Both white marlin and roundscale spearfish (*Tetrapturus georgii*) are taken as bycatch on longline fishing gear targeting tuna and swordfish (AWMSR, 2007). White marlin are also targeted in recreational fishing tournaments along the U.S. east coast, which also often land roundscale spearfish (AWMSR, 2007).

White marlin and the roundscale spearfish are sympatric and morphologically very similar. Roundscale spearfish were validated as a genetically distinct species in 2006 (Shivji et al., 2006). Species misidentification of the roundscale spearfish and the white marlin has likely occurred given the complexity of accurate identification (AWMSR, 2007). Little is known about the life history of roundscale spearfish. Beerkricher et al. (2009) examined the proportion of spearfish in the total catch identified as white marlin and found it ranged between 0 and 100

percent (n=1443, mean = 27 percent) per set observed in the western north Atlantic, with high variability across geographic areas. Roundscale spearfish were found more frequently offshore compared to nearshore. Given the misidentification problems between white marlin and roundscale spearfish, the SCRS working group decided prior to the 2012 stock assessment that white marlin and roundscale spearfish would be combined as a mixed stock until more accurate species identification and differentiation of species catches are available (SCRS, 2011).

Total catch of white marlin peaked in the mid 1960's (AWMSR, 2007). Total catch of white marlin remained relatively stable through the 1980s and into the early 1990s. In the mid 1990s there was a marked decline in white marlin catch. ICCAT responded by adopting numerous resolutions protective of white marlin, including a reduction in landings and a rebuilding program (AWMSR, 2002; WMSRT, 2007). Both the 2002 and the 2007 white marlin status reviews discussed this marked decline in total catch and described protective measures adopted by ICCAT (WMSRT, 2002; AWMSR, 2007). White marlin catch has remained relatively stable in recent years (SCRS, 2011; 2012). Relative fishing mortality has been declining over the past ten years, it is now most likely to be below the fishing mortality rate expected to yield maximum sustainable yield (F_{msy}), and it is highly likely to remain below F_{msy} (SCRS, 2012). The BRT concluded that the current regulatory mechanisms are sufficient to prevent continued stock decline (AWMSR, 2007).

Analysis of the Petition

We evaluated whether the petitions presented the information indicated in 50 CFR 424.14(b)(2). Both petitions stated the administrative measures recommended for the white marlin. Neither petition included the scientific name of the species. Both petitions included a

narrative justification for the recommended measure, including some information on numbers of the species, historical geographic occurrences of the species, and threats faced by the species. Both petitions utilize information from the 2011 ICCAT Blue Marlin Stock Assessment and While Marlin Data Preparatory Meeting (SCRS, 2011). Only the CBD petition included supporting references.

White marlin is recognized as a taxonomically-distinct species and is therefore an eligible entity for listing under the ESA. We previously determined the Atlantic white marlin constitutes a single species throughout the Atlantic Ocean and there are no populations that warrant consideration of ESA listing (73 FR 843; January 4, 2008). The Chambers petition, seeking protection of the “North Atlantic sub-population of the white marlin,” included information summarizing spatial and temporal difference in spawning north and south of the equator that in turn indicates “two entirely distinct sub-populations which do not interbreed” and a graph showing total catch of white marlin north of the equator by gear with live and dead discards from 1956 - 2010 (SCRS, 2011). The Chambers petition did not include any information supporting white marlin population structure that was not previously considered by us. Therefore the best available information indicates white marlin are a single species throughout its range without separation into populations.

Information on Impacts and Threats to the Species

We evaluated whether the information in the petitions and information in our files concerning the extent and severity of one or more of the ESA section 4(a)(1) factors suggest these impacts and threats may be posing a risk of extinction for white marlin that is cause for concern. Collectively, the petitions state that three of the five causal factors in section 4(a)(1) of

the ESA are adversely affecting the continued existence of white marlin: (A) present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial and recreational purposes; and (D) inadequacy of existing regulatory mechanisms. In the following sections, we use the information presented in the petition and in our files to determine whether the petitioned action may be warranted.

Present and Threatened Destruction, Modification, or Curtailment of Habitat or Range

The CBD petition stated the range of the white marlin has been reduced between the 1960s and the 1990s per Worm and Tittensor (2011). Other information provided by CBD contradicts this range reduction and shows Worm and Tittensor's (2011) finding to be obsolete: Lynch et al. (2011) includes a figure summarizing distribution of white marlin in the Atlantic Ocean from 2000 to 2006 that indicates white marlin occur in all the areas identified as absent by Worm and Tittensor (2011). Information in our files (SCRS, 2011; 2012) also indicates the range has not contracted. Therefore we conclude the petition does not provide substantial information indicating the range of the white marlin has been constricted and further note that a slight variation in range of a species that occurs across the Atlantic Ocean and 70 degrees latitude would not alone constitute an extinction risk.

The CBD petition states "studies have found that billfish, such as white marlin, are sensitive to water quality conditions, which are rapidly changing as a result of climate change and ocean acidification" and refers to Lynch et al. (2011). We reviewed Lynch et al. (2011) and did not find statements supporting CBDs' assertions. Further, neither CBD nor Lynch et al. (2011) provide any explanation or connection of how water quality condition, climate change, or ocean acidification are operative threats to the continued existence of the white marlin. We did

not find information in our files indicating how presumed changes in water quality from climate change and ocean acidification would be an extinction risk of concern to white marlin.

In summary, information presented in the two petitions and in our files does not constitute substantial information indicating that the present and threatened destruction, modification, or curtailment of habitat or range may be causing extinction risk of concern for white marlin.

Overutilization for Commercial and Recreational Purposes

The CBD petition quotes from Beerkircher et al. (2009) that white marlin are among “the most overexploited pelagic fishes.” The CBD petition also attributes other statements to ICCAT (SCRS, 2011) including “white marlin populations have failed to rebuild, and they have also continued to decline and landings indicate this continued decline and the catch-per-unit-effort shows instability in the population.” We reviewed SCRS (2011) and could not substantiate or find support for the statements. In addition, the CBD petition did not provide any explanation on how these statements correspond to extinction risk.

The Chambers petition says the status of the white marlin population “is well below the level at which there is a danger of recruitment failure which is considered to begin at 50 percent of MSY,” and, “Passing such a threshold means there are becoming too few breeders to replace the population which can then spiral ever faster towards extinction.” The Chambers petition did not provide any supporting information for these claims. It included no information or explanation on how this threshold corresponds to extinction risk. The petition did not provide information on recruitment failure or the number of current breeders. We are unaware of data, and did not find information in our files, to support this claim.

The CBD petition did provide some information on white marlin population size, somewhat relevant to Mr. Chambers' claims. It cites the decline in B/Bmsy from 1.02 in 1970 to 0.44 in 2010 (Collette et al., 2011) as evidence of overutilization of white marlin. B/Bmsy is a relative abundance metric in fishery management that expresses a stock's biomass as a proportion of the biomass that would support the continuous, maximum harvest of that stock. Although it provides B/Bmsy figures for white marlin, the CBD does not provide any rationale why a B/Bmsy of 0.44 causes an extinction risk of concern. We do not believe 0.44 B/Bmsy alone is a cause for concern, as it represents fishing potential rather than absolute abundance, and does not necessarily have any relationship to a species' extinction risk. In addition, we interpret the B/Bmsy trend presented in Collette et al. (2011) as declining between 1970 and 1990, followed by a stable or increasing, but not decreasing, stock size from 1990 through 2010.

The Chambers petition states white marlin abundance has "fallen to about 2 percent of an unfished level of abundance by the end of 2007." While population decline can result in extinction risk that is cause for concern in certain circumstances, the decline described in the Chambers petition appears to have been derived from reported landings. Although a decline in reported landings can oftentimes indicate a decrease in total abundance, in this case it is likely this decline in landings is a result of the regulations ICCAT has instituted since 1995 to reduce white marlin landings. Therefore, we conclude landings data do not indicate a decline in white marlin abundance and do not indicate that white marlin is being negatively impacted by overutilization. We are unaware of any data suggesting that white marlin have declined to the level Mr. Chambers claims, which would correspond to a B/Bmsy value of 0.04 or one eleventh the value presented in the CBD petition.

The CBD petition cites the “vulnerable” status classification made by IUCN to support listing white marlin as threatened or endangered under the ESA, and includes Collette et al. (2011) as a reference. As discussed above, risk classifications by other organizations or agencies (e.g., IUCN) do not alone provide rationale for a positive 90-day finding under the ESA. However we have evaluated the IUCN source information for white marlin relative to the ESA standards of extinction risk and we find the IUCN classification does not present information that was not already considered in the 2007 status review (e.g., the 2006 ICCAT stock assessment) or that was not included by CBD in their petition and discussed herein (e.g., range constriction as described by Worm and Tittensor, 2011 and catch composition per Beerkircher et al., 2009).

The CBD petition discusses how roundscale spearfish reported in the white marlin catch can affect ICCAT stock assessments and requests a new assessment. Citing Beerkircher et al. (2009), the CBD petition suggests we adopt a proportion of roundscale spearfish to white marlin in the total catch between 21 and 42 percent and re-evaluate our prior finding. As previously discussed, the proportion of spearfish in the total catch identified as white marlin was highly variable and spatially limited (Beerkircher et al., 2009). In evaluating the findings from Beerkircher et al. (2009), ICCAT subsequently concluded reliable estimates on the proportion of roundscale spearfish reported as white marlin in the catch rates were not available, and elected to perform a mixed stock assessment until more accurate species identification and differentiation of species catch were available (SCRS, 2011). Specifically, ICCAT determined a comprehensive Atlantic-wide sampling program, as well as a large-scale retrospective analysis, would be required for a reliable population-level estimate of roundscale spearfish reported as white marlin (SCRS, 2011). All white marlin biological material sampled prior to 2006 is

currently presumed to contain unknown proportions of roundscale spearfish (SCRS, 2012). We acknowledge it is important to consider the ratio of roundscale spearfish reported in the white marlin catch, however we concur with ICCAT that it is not possible at this time.

The CBD petition referenced the simulations performed by Beerkircher et al. (2009) and stated they were an indication of population decline. The CBD petition does not include any additional information indicating how these simulations indicate extinction risk. We carefully reviewed the simulations; we noted they include the period 1955 through 1999 when the marked decline in white marlin catch occurred, and do not project through subsequent years when bycatch was stabilized and reduced. Therefore we do not find this simulated decline in roundscale spearfish concurrent with white marlin surprising, as the simulations are partitioning the noted decline in one species' (white marlin) catch rates that occurred through the 1990s across two species (white marlin and roundscale spearfish). We conclude the simulations do not provide relevant information regarding the extinction risk of white marlin or information on the current status of the white marlin.

In summary, the petitions do not present information regarding the decline of white marlin catches in the 1990s that we have not already considered in prior determinations as discussed (see "Species Description"). There is no information in our files to suggest our prior conclusions regarding the 1990s decline in white marlin catch were incorrect or insufficient. We conclude the characterization of continuing population decline in the petitions is unsubstantiated. The petitions did not provide substantial information that white marlin populations are unstable or that species misclassification poses an extinction risk. Therefore we

conclude the petitions do not present substantial scientific information indicating that listing may be warranted due to overutilization for commercial and recreational purposes.

Inadequacy of Existing Regulatory Mechanisms

The CBD petition states Lynch et al. (2011) “demonstrates that existing regulatory mechanisms are inadequate to prevent the decline of white marlin.” We carefully reviewed Lynch et al. (2011) and could not find statements supporting CBDs’ assertions. In fact, Lynch et al. (2011) states measures already implemented are likely beneficial to some degree; in combination, reductions in landing and live release “should slow and possibly reverse downward population trends...some evidence of population response to these management strategies may already be observable.” The Chambers petition states that ICCAT is not managing the white marlin to produce the maximum sustainable yield, but does not explain how this leads to extinction risk of concern. Fishery management targets, such as maximum sustainable yield, and statuses, are based on different criteria than that required by the ESA and, thus, do not necessarily have any relationship to a species’ extinction risk. There is no information in our files that indicates the current regulatory mechanisms are insufficient to prevent endangerment of the white marlin. The petitions did not present other information to indicate how the inadequacy of existing regulatory mechanisms is an extinction risk to the white marlin.

While the petitions state additional regulations are required to ensure rebuilding of the marlin populations, they do not provide any explanation on how the existing regulatory mechanisms are inadequate to prevent endangerment of the white marlin. In summary we find the petitions, and information readily available in our files, do not present substantial information

to suggest the existing regulatory mechanisms are inadequate and may be causing an extinction risk for white marlin.

After reviewing the information contained in the petitions, as well as information readily available in our files, we conclude these petitions do not present substantial scientific or commercial information indicating the petitioned action may be warranted.

References Cited

A complete list of all references is available upon request from the Protected Resources Division of the NMFS Southeast Regional Office (see ADDRESSES).

Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Dated: January 25, 2013.

Alan D. Risenhoover,
Director, Office of Sustainable Fisheries, performing the functions and duties of the Deputy
Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.

